

FastForwardGeorgia

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Georgia, welcome to your new data center!

After more than a year of planning and preparation, six weekend moves and the dedication and teamwork of more than 200 people across GTA and other agencies, the state of Georgia's data center has been successfully relocated from its crumbling downtown facility to a state-of-the-art, highly secure location outside of Atlanta.



Pictured: The new data center's raised floor is much more spacious, clean and organized than the old.

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Trials will test VoIP in various business settings

GTA will begin VoIP trials with five state agencies in March 2006. Each participating agency will be paired with a different vendor, and the trials will test VoIP in various business settings and with different applications, including conference calling, instant messaging and unified messaging. The trials will help GTA and agencies identify and resolve issues with

- voice quality
- security threats from viruses and worms
- updating agency LANs so they support VoIP
- maintaining telephone service during power or LAN outages.

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"With the new state data center, agencies can rest assured that their information is more secure, and their systems will operate with greater efficiency and reliability," said GTA Executive Director and State CIO Tom Wade. "The new data center is an important foundation that will support future innovations and enhancements in technology. We will continue to build on this foundation to improve the way Georgia government serves the state and its citizens."

Journey under blue lights

Each weekend, up to four large moving trucks were packed up with servers, tapes, computers, communication switches, network equipment and other hardware to go to the new data center. Each truckload was insured for half a million dollars.

Two **Georgia State Patrol** cars escorted each truck for the 40-mile journey, with blue sirens flashing and no stopping for the entire trip. The **Department of Transportation** also helped make sure the roads were free and clear for the entire journey. With their help, GTA maintained its commitment to a maximum four-hour turnaround on each piece of equipment moved.

Powering up

Each move was like a round-the-clock relay race. When the trucks arrived, installations began. Once the equipment was powered up and running, agencies quickly took to testing their applications in the new environment. To win the race, everything had to be ready to go before business hours opened again.

More than 100 people from GTA and another 100-plus people from 17 agencies got less than a couple of hours' sleep over the course of six weekends in October, November and early December. ■



Pictured: Jim Howell (right), GTA's executive project director for the data center relocation, gives Georgia state troopers a tour of the old facility as the moving trucks were loaded with equipment. The state troopers made sure each truck's journey to the new facility was quick, non-stop and safe.

Praise for the new data center

"A flawless transition."

***Jim Lientz, Chief Operating Officer
Office of the Governor***

"This is a world-class data center. We are well positioned now to expand our operations and move forward in building a new era of technology for the people of the state of Georgia."

***James D. Lester III, Chairman
GTA Board of Directors***

"It's what every technical person dreams of. It's a perfectly designed, well developed and maintained property."

***Dean Watts
Department of Human Resources***

"The move was seamless. That was the main thing we were hoping for, and it was achieved."

***Angela Walden
Georgia Merit System***

Columbus Day “play-by-play”

To give you an example of the activity, here's the play-by-play from the Columbus Day holiday weekend (Oct. 7-10, 2005), when the team moved the IBM mainframe platform – which alone processes 80 percent of the state's business – and the UNIX portal test and development (T&D) environment, which runs on Sun servers.

- Beginning Friday evening, the team tested backup files for the portal T&D environment, shut down the system at the old data center and removed the data tapes from the racks. Movers began loading servers onto trucks.
- Just after midnight, now Saturday, servers began arriving at the new data center. By 3:30 a.m., the UNIX team was unpacking and taking inventory. By 9:40 a.m., they'd "racked" all of the portal servers, with 90 percent of systems powered up without error.
- Meanwhile, at the old data center, the IBM mainframe was powered down, and more than 100,000 tapes were removed from the tape library.
- By noon, all Sun servers for the portal T&D environment were installed at the new data center and powered up without error.
- At 10:47 p.m., the IBM "A" and "B" processors were up and running.
- At 8 a.m. Sunday, agency staff began testing their applications. Agencies remained closely involved all day Sunday with post-move application testing,

problem reporting and application certification.

- By 4:30 Sunday afternoon, agencies confirmed successful testing of the following applications: Teachers Retirement; all Secretary of State applications including Corporations, Voter Registration and Elections; Merit System FLEX; State Board of Workers' Compensation; GTA Service Center; DOT Accident Reporting; DCH MEMS; GTA

PRISM and RABS, and all DDS applications.

- Shortly after 7 p.m., all applications had been tested and accepted. The IBM mainframe move was complete.
- By 11 p.m. Sunday, the portal T&D configurations and testing were complete. This environment was now fully moved, leaving the Monday holiday open for some much-needed rest and relaxation!

Georgia's new data center: Facts & figures

Data and systems

- ◆ 65 terabytes (that's 65 trillion bytes!) of storage space
- ◆ 2N+1 redundancy (for every system, there's a backup plus a spare)
- ◆ 143 computer applications supported for more than 50 state agencies
- ◆ 4 main computing platforms: IBM, Unisys, UNIX, Windows

Cabling and equipment

- ◆ 305 miles of copper Ethernet cable installed with more than 200,000 connections
- ◆ Two miles of fiber optic cable installed with 6,600 connections
- ◆ 12,500 patch cords installed for connectivity
- ◆ Copper and optic installed in 90 days – normally takes 8 months
- ◆ 250,000 data tapes moved and reloaded in tape robots or cabinets
- ◆ 80,000 obsolete tapes degaussed (erased) and destroyed

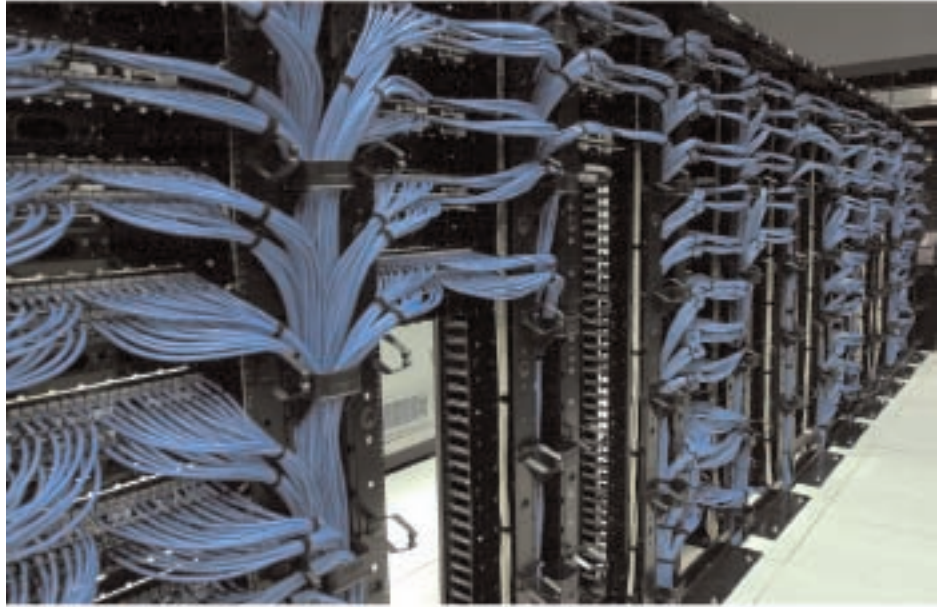
Secure infrastructure

- ◆ Four 2000-kilowatt diesel generators with 20,000 gallons of on-site fuel storage
- ◆ Eight 750-kilovolt ampere uninterruptible power supply systems with battery backup
- ◆ Four 600-ton chillers and a one-million gallon cold water storage tank
- ◆ Fully redundant electrical and mechanical systems
- ◆ Modern fire detection and fire fighting systems
- ◆ Biometric access at all security doors

Added value

- ◆ New lease redirected \$18 million in bond money to other uses
- ◆ No significant increase in ongoing operating costs
- ◆ Greater operating efficiency, reliability and security

GTA completes data center relocation



Above: Hundreds of miles of cables keep the state's data flowing smoothly at the new data center.



Left, top: Technicians disconnect Sun servers at the old data center and prepare to load them onto trucks for their 40-mile trip.

Left, center: Capitol Hill Team Facilities Coordinator Mark Brown, Project Director Jim Howell and Executive Staff Analyst George Gray, shown at the old data center, were on site every weekend to oversee details of the move.



Pictured: A Sun server is moved into the new data center. GTA contracted with SunGard Availability Services to plan and manage the move.



Pictured: At the new data center, this monitoring section overlooks the raised floor, where servers and other hardware operate.

VoIP tested in various business settings *(from page 1)*

Trial results will be used in developing a Request for Proposal (RFP) for VoIP services. The RFP is scheduled to be issued in June 2006. The resulting state contract will be available in September 2006 to make migration easier for agencies that are ready for VoIP.

Agencies taking part in the trials are Board of Regents, Georgia Bureau of Investigation, Georgia Forestry Commission, Human Resources and Technical and Adult Education.

GTA is taking other steps to encourage VoIP adoption, including

- developing statewide equipment standards,
- using VoIP-compliant wiring in newly constructed and renovated space, and
- adding IP telephones to the state's telecom equipment contracts.

Linking VoIP with other tech upgrades

GTA began developing its formal plan for VoIP implementation in February 2005. To make VoIP usage as cost-effective as possible, GTA recommended that agencies approach implementation in phases and link it to other changes taking place at the same time, such as

- when an agency builds a new facility,
- when existing telecom equipment needs replacement,
- when a LAN is being upgraded to support new technologies, or
- when an agency needs greater support for mobile employees and teleworkers.

For more information about the VoIP trials, visit GTA's Web site at www.gta.georgia.gov. ■

Child support call centers among Georgia's VoIP leaders

GTA recently helped Georgia's Office of Child Support Enforcement (OCSE) set up two VoIP-enabled call centers.

The call centers also rely on Georgia's newly updated wide area network based on multi-protocol label switching (MPLS) technology. By combining VoIP with the MPLS network, OCSE is saving about \$7,000 per month in long-distance charges. The combination also makes it easier to support teleworkers and mobile employees, and the MPLS network supports Quality of Service, a technology required by VoIP to ensure voice quality by preventing delays, audio breakups and popping or clicking sounds.

The call centers respond to custodial and non-custodial parents inquiring about establishing and enforcing child support orders or updating their personal information. They are located in Albany and Macon but answer calls from the cities of Augusta, Columbus and Valdosta, and the counties of Cobb, DeKalb and Fulton in metropolitan

Atlanta. Since the call centers opened October 1, 2005, the number of calls has increased from more than 23,000 in October to 47,600 in December. They are capable of answering up to 6,000 calls each day.

More than dialtone

"VoIP is much more than a new way to obtain dialtone. It can actually enhance the way we do business," says Kim Ruple, a GTA director who oversees telecom service delivery to state agencies. "Its greater value is the capability to link voice with applications and data so employees can work smarter."

The child support call centers employ 66 agents on site — 50 in Macon and 16 in Albany — along with 19 remote operators around the state. In addition to providing greater support for teleworkers and mobile employees, VoIP makes it possible for managers at the call centers to track everyone logged into the system and their call volumes regardless of their work location. One benefit is being able to manage employees and measure their productivity more easily.

Since the call centers use Georgia's new MPLS network, employees access voice services and child-support applications and databases through a single network instead of multiple networks.

"I'm excited about implementing converged communications in Georgia and providing support for VoIP on our new MPLS network," said Tom Wade, GTA executive director and Georgia's chief information officer.

GTA is also working with the Georgia **Department of Technical and Adult Education** to implement VoIP on the campuses of four technical colleges. ■

E-mail consolidation: Getting state government on the same page

As recently as just 15 years ago, most state agencies operated without e-mail communication. Those days are hard to imagine now, when 89,000 state employees rely on e-mail every day. The Commission for a New Georgia recommended an initiative to ensure that this form of communication—which is now as critical as the telephone—runs as efficiently as possible.

Working with GTA, the commission determined that consolidating e-mail can offer the state cost savings and disaster recovery capability for e-mail. Agency e-mail networks developed over time and use many different systems, including Lotus Notes, Exchange and GroupWise, among others. The result has been unnecessary duplication and expenditures.

Consolidation offers the potential for significant savings, possibly reaching \$3 million per year after full implementation. The effort also has the support of Gov. Perdue, who noted the initiative during his January meeting with agency heads.

GTA released a Statement of Need for this initiative in February 2006. “GTA will work with the vendor and agencies to review state agency e-mail infrastructure and business and technical requirements,” said

Suhas Uppalapati, GTA's director of IT planning. “We'll be interviewing agencies for specifics about exactly what they need.” The CIO Council will also play an important role in defining requirements. GTA plans to release an RFP this summer and begin a pilot project with a few agencies in the fall.

In September 2005, GTA surveyed agencies about their e-mail systems. Information from almost 20 agencies who responded to the survey helped to form the business case, which more than 30 agencies reviewed in October 2005.

“We're aiming for a system that meets everyone's needs: efficiency, productivity and functionality.”

***– Suhas Uppalapati
GTA Director of IT Planning***

Not just for e-mail anymore

“We know that agencies rely on their messaging systems for more than just e-mail,” said Suhas. “We plan to work with them to place state government on a single system, and we will make sure they have the added functionality they need, including services such as task management, calendaring and workflow.”

Suhas added that the consolidated system will also include add-on services for mobile devices, such as BlackBerrys and Treos, and instant messaging. The system will support collaboration tools, such as SharePoint, that many agencies use to manage work.

With all state agencies using the same messaging or “groupware” system, employees will have ready access to each other's calendars, addresses and other contact information.

GTA recognizes that some agencies may be reluctant to switch to another system. “We're aiming for a system that meets everyone's needs: efficiency, productivity and functionality,” Suhas said. “That's why agency input is so important. That information, along with what we learn during the pilot project, will help determine the next steps.”

For more information about the initiative, contact Suhas at suppalapati@gtga.ga.gov or 404-463-4320. ■

Colorado recognizes GTA for help with IT purchasing

GTA was recently awarded a Certificate of Appreciation from Colorado's Commission on Information Management for helping state officials develop a model IT contract.

"Let me express our sincere appreciation for your valuable time, contract expertise and lessons learned," said Elaine Radford, Colorado's program manager for the model IT contract project.

She said the Certificate of Appreciation formally expressed the state's gratitude for GTA's support and information sharing.

The model contract is designed to make IT procurements simpler and faster. It also promotes better decision making about which products and services to purchase.

In addition, GTA contributed to Colorado's IT Administrative Guide, which sets forth procedures to follow in conducting technology procurements.

GTA became involved in Colorado's project through our active participation in the National Association of State Chief Information Officers (NASCIO), whose membership includes senior IT executives from all 50 states, six U.S. territories and the District of Columbia. NASCIO promotes government excellence through quality business practices, information management and technology policy. ■

GTA offering agencies Desktop Intrusion Prevention

GTA is now offering Desktop Intrusion Prevention software that works with other programs to provide an additional layer of security on desktop PCs and laptops.

The software — Proventia Desktop from Internet Security Systems — protects against known viruses and worms, spyware and hacker attacks. It also protects against unknown threats by analyzing a file to determine if it might be harmful.

Agencies can install and manage the software themselves, or GTA can manage the software for them.

Multi-layered protection

With today's Internet threats, antivirus software alone isn't enough. While conventional antivirus software blocks only known viruses and worms, GTA's Desktop Intrusion Prevention software offers multi-layered protection.

- The software provides a personal firewall to block known threats.
- The intrusion prevention function constantly monitors for activity the firewall might miss.
- If the application control function detects an unknown or suspicious program, it shuts down the program.

Network administrators can choose from four security levels — trusting, cautious, nervous or paranoid — and tailor each level to meet an agency's specific needs.

Centralized management

The Desktop Intrusion Prevention software can be centrally managed with an included module that also produces customized reports about intrusion attempts. The module makes it easy to manage the software in agencies of all sizes.

Levels of service and cost

GTA is offering the software at a special discount to state agencies.

- If an agency installs and manages the software itself, GTA charges a maintenance fee of 83 cents per seat per month (\$10 per seat per year).
- If GTA manages the software on behalf of the agency, the cost is \$1.75 per seat per month (\$21 per seat per year).
- If GTA manages an agency's LAN, the software is provided automatically as part of the management fee.

Continuous updates

With GTA's maintenance and service agreements, agencies will receive updates so they are always running the latest version.

For more information, agencies may contact their GTA account manager. ■

Computer security: **Don't get hooked by a phishing scam**

Phishing is a scam where Internet fraudsters send spam or pop-up messages to lure personal and financial information from unsuspecting victims.

Here are a couple of examples.

- “We suspect an unauthorized transaction on your account. To ensure that your account is not compromised, please click the link below and confirm your identity.”
- “During our regular verification of accounts, we couldn't verify your information. Please click here to update and verify your information.”

Follow the advice of experts to avoid getting hooked.

- Don't reply to e-mail or pop-up messages that ask for personal or financial information, and don't click on links in the message. Don't cut and paste a link from the message into your Web browser – phishers can make links look like they go one place but actually send you to a different site.
- If you are concerned about your account, contact the organization using a phone number you know to be genuine, or open a new Internet browser session and type in the company's correct Web address yourself.
- Use anti-virus software and a firewall, and keep them up to date.
- Don't e-mail personal or financial information.
- Review credit card and bank account statements as soon as you receive them to check for unauthorized charges.

- Be cautious about opening any attachment or downloading any files from e-mails you receive, regardless of who sent them.
- Forward spam that is phishing for information to spam@use.gov and to the company, bank or organization impersonated in the phishing e-mail. You also may report phishing e-mail to reportphishing@antiphishing.org. The Anti-Phishing Working Group, a consortium of ISPs, security vendors, financial institutions and law enforcement agencies, uses these reports to fight phishing.
- If you've been scammed, visit the Federal Trade Commission's Identity Theft Web site at www.consumer.gov/idtheft.

For more information about computer security, visit OnGuard Online at www.onguardonline.gov. ■

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100 Peachtree Street, Suite 2300,
Atlanta, GA 30303

404-463-2300, Fax 404-463-2370

Paula Calhoun and Michael Clark, Editors
Hettie Smith, Designer

Georgia Technology Authority

Tom Wade

GTA Executive Director & State CIO
twade@gta.ga.gov

Cigdem Delano

Deputy Executive Director
cdelano@gta.ga.gov

Steve Nichols

Chief Technology Officer
snichols@gta.ga.gov

Michael Cuccaro

General Counsel
mcuccaro@gta.ga.gov

Ron Lutz

Senior Operations Officer
rlutz@gta.ga.gov

Roosevelt Council

Senior Financial Officer
rcouncil@gta.ga.gov

David Hightower

Senior Technology Planning Officer
dhightower@gta.ga.gov

Joyce Goldberg

Communications Director
jgoldberg@gta.ga.gov

James D. Lester III, Chairman,
GTA Board of Directors